Apatura metis Freyer, 1929

balcanica Nguyen Thi Hong, 1976

"A.[patura] m.[etis] balcanica subsp. nov." Nguyen Thi Hong, 1976 (Les Apatura: Polymorphisme et Speciation (Lepidopteres Nymphalidae): 39; Pl. 6: Fig. 1; Pl. 10: Figs 1, 2). Type locality: [Serbia:] "Kragouyevatz" (Nguyen Thi Hong, 1976: 39).

Holotype male with labels: (1) printed (on white paper) "Kragouyevatz | Servia | W. Taborski"; (2) printed (on white paper) "B.M.1951-635"; (3) printed (on white paper) "BMNH(E) #720374"; Paratypes male, female with labels: [male] (1) printed (on white paper) "Greece | Merlin Coll. | 96-275."; (2) handwritten (on white paper) "Acarnan. | 11 63."; (3) printed (on white paper) "BMNH(E) #720372" [Illustrated on Fig. 1]; [female] (1) printed (on white paper) "Kragouyevatz | Servia | W. Taborski"; (2) printed (on white paper) "B.M.1951-635"; (3) printed (on white paper) "BMNH(E) #720373" [Illustrated on Fig. 2].

The paratypes have been illustrated on plate 10: figs 1, 2. The originally stated locality of the specimen illustrated on fig. 2 (the female), Greece, is erroneous (cf. labels above). Actually all the specimens represent *Apatura ilia* ([Denis & Schiffermüller], 1775).

Acknowledgments

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Black Hairstreak Satyrium pruni, L., (Lep.: Lycaenidae) courtship behaviour

On 15 June 2006, eight members of the Cambridgeshire & Essex branch of Butterfly Conservation visited Glapthorn Cow Pastures Wildlife Trust Reserve, Northamptonshire, to learn about monitoring and conservation of the Black Hairstreak butterfly at one of its best sites in the UK. We were given a guided walk and commentary by the warden, Dick Smith, previous warden, Geoff Gent, plus local experts Mick Groom and Ioan Thomas. We observed over forty of the butterflies between 09.30 and 15.00 at locations throughout the wood, with much

territorial activity in evidence. At about 11.45, Mick Groom and Vince Lea observed a Black Hairstreak settle on a Blackthorn *Prunus spinosa* bush at around 3m above ground level, on the sunny side of a ride. A second Black Hairstreak flew past, but instead of being evicted in the typical high speed vertical chase that normally seems to follow such a meeting, the pair flew much closer together in a short upward spiral. They ascended for only 50 cms or so before landing together on the same bush. They repeated this brief dance and settled again on the outside of the bush. Shortly after this, they flew close together deep into the middle of the bush, but fortunately still in view from one angle – the bush was relatively open-centred, and a spot of sunlight penetrated to their perching position. We initially followed them to this spot using binoculars, and the sun-spot helped us to get a visual fix on the location. It was then possible to train a tripod-mounted telescope onto the spot, such that all members of the party could observe the pair.

The pair stood side-by-side on a leaf to start with, then one butterfly turned round, and they joined together in the typical lepidopteran mating position of back-to-back. They moved slightly during the 25 minute copulation, changing angle from about 180 degrees apart to perhaps 140 degrees, but otherwise they remained in the same position. After separation, one of the butterflies flew off immediately and was lost from sight. The second butterfly turned around on the spot, walked onto a different leaf, cleaned its antennae for a short while, then flew off after about 5 minutes.

The scarcity, habits and habitat, mean that observing courtship of this species is always going to be difficult. The brevity of the courtship and the inaccessible location chosen for the prolonged mating would, if typical, further explain why this behaviour has not, as far as I know, been reported in the literature before. Black Hairstreak have a notoriously short emergence period as adults, and this mating occurred four or five days after the first individuals were seen at this site, suggesting that females may be mated soon after emergence, after which they presumably spend time egg-laying or feeding.

My thanks must go to Dr Robin Field, Cambs & Essex Butterfly Conservation, and to the dedicated members of the Glapthorn Cow Pastures reserve, who gave us an excellent insight to their work.— VINCE LEA, 236 Wimpole Road, Barton, Cambridge, Cambridgeshire CB3 7AE (Email: vincelea@btinternet.com).

Do all Glow-worms light up early?

As a result of a recent observation in North Wales I found the observations of Tim Gardiner (2006. Effect of survey start time on counts of the Glow-worm, *Lampyris noctiluca* (Col., Lampyridae) *Ent. Rec.* 118: 184-185) rather intriguing. I wonder about the reliability of his assertion that glow-worms all light up prior to midnight. On the evening of 20/21 July 2006 a colleague and I ran two lights over sheets for recording moths at Fedw Fawr, Anglesey (O.S. grid reference SH 6081). The two lights were nearly 70 yards apart and effectively out of sight of each other. The track between the two lights was well-trodden so regular visits from one to the other